REMARKS

Claims 1, 2, 7, 13, 14, 15, 18, 23 and 24 have been amended.

The Examiner has objected to applicant's title as not being descriptive. Applicants have amended the title to read "IMAGE PICKUP APPARATUS CAPABLE OF MAKING AN EFFECTIVE DEPICTION BY REDUCING PIXEL SIGNALS ." The aforesaid title is believed to be descriptive of the invention, thereby obviating the Examiner's objection.

The Examiner has rejected applicant's claims 7-9, 11, 12, 18-20, 22 and 24 under 35 U.S.C. 102(b) as being anticipated by the Konishi, et al. (US 5,790,192) patent. The Examiner has also rejected applicant's claims 1-6, 10, 13-17, 21 and 23 under 35 U.S.C. 103(a) as being unpatentable over the Konishi, et al. patent in view of the Parulski, et al. (US 5,828,406) patent.

Applicant has amended applicant's independent claims 1, 7, 13, 18, 23 and 24, and with respect to such claims, as amended, and their respective dependent claims, the Examiner's rejections are respectfully traversed.

Applicant's independent claims 1, 7, 13, 18, 23 and 24 have been amended to better define applicant's invention. More particularly, applicant's independent claim 1 has now been amended to recite a second mode in which the pixel signals obtained by an image pickup circuit are reduced by thinning out the pixel signals obtained in different tack from said first mode. Applicant's independent claims 13 and 23 have been similarly amended.

Applicant's independent claim 7 has been amended to recite a controller which performs control in such a way as to change, according to an object of image of which is to be picked up, a method of reducing the pixel signals obtained by an image pickup circuit, wherein a depth of field changes when the method of reducing the pixel signals changes. Applicant's independent claims 18 and 24 have been similarly amended. This feature is illustrated by the

description in applicant's specification at page 16, line 26 to page 17, which discloses that the depth of field in the second mode ("PORTRAIT" mode) in the first emodiment of applicant's invention is shallower than the depth of field in the first mode ("LANDSCAPE" mode) because of the difference in the focal length obtained in each mode.

The constructions recited in applicant's amended independent claims 1, 7, 13, 18, 23 and 24, and their respective dependent claims, are not taught or suggested by the cited art of record. More particularly, looking first at applicant's independent claims 7, 18 and 24, the Examiner has argued that the Konishi, et al. patent discloses an image pickup circuit (figure 1, element 4) which photoelectrically converts, into pixel signals, a light image formed through a lens, and a controller (figure 1, element 1) which performs control in such a way as to change, according to an object an image of which is to be picked up, a method of reducing pixel signals obtained by said image pickup circuit (column 13, lines 40-51).

Applicant has reviewed the passages of the Konishi, et al. patent cited by the Examiner, i.e., column 13, lines 40-51, and they disclose only that when a panorama or an HD mode is set, the image is nonetheless taken with the ordinary image-taking picture field mode so as to avoid the main photographing object to be partially cut off due to the negligence of the mode change by a user. There is thus nothing taught or suggested in these passages, or elsewhere in the Konishi, et al. patent, as to changing the depth of field, and particularly as to changing the depth of field when the method of reducing the pixel signals is changed by the controller. Applicant's amended independent claims 7, 18 and 24, and their respective dependent claims, all of which recite "wherein a depth of field changes when the method of reducing the pixel signals changes", thus patentably distinguish over the Konishi, et al. patent.

Turning now to the constructions recited in applicant's amended independent claims 1, 13 and 23, and their respective dependent claims, the Examiner has argued that the Konishi, et al. patent discloses an image pickup circuit (figure 1, element 4) and a controller (figure 1, element 1) which sets an image pickup mode selected from among a plurality of image pickup modes (see column 4, lines 53-55), said plurality of image pickup modes including at least a first mode (panorama mode) in which the pixel signals obtained by said image pickup circuit are reduced by extracting pixel signals of a predetermined continuous area from the pixel signals obtained by said image pickup circuit. The Examiner has acknowledged that the Konishi, et al. patent lacks a mode in which the pixel signals obtained by said image pickup circuit are reduced by thinning out the pixel signals. The Examiner has, however, argued that the Parulski, et al. patent discloses such a mode in column 2, lines 22-37 and that it would have been obvious to one of ordinary skill in the art at the time of the invention to have been motivated to modify Konishi, et al. to include the mode disclosed in Parulski, et al.

In reviewing the passage of the Konoshi, et al. patent cited by the Examiner, this passage and those that follow disclose that in the Konoshi, et al. device the area of the CCD that is read out is based on the detected visual axis and is reduced, or cut off at its top and bottom, for the panorama and HD modes. The Parulski, et al. patent, in turn, teaches a camera having a preview operating mode in which the number of color display pixels received from the sensor may be reduced by combining same-colored image pixel signals into a fewer number of pixels in order to display a low resolution image having the reduced number of pixels on an LCD display (Col. 2, lines 29-37; Col. 4, lines 30-55).

Neither patent thus teaches or suggests using different modes of processing pixels obtained by an image pickup in different ways, let alone teaches or suggests a setting controller

which sets an image pickup mode selected from among a plurality of image pickup modes, said plurality of pickup modes including at least a first mode in which the pixel signals obtained by said image pickup circuit are reduced by extracting pixel signals of a predetermined continuous area from the pixel signals obtained by said image pickup circuit and a second mode in which the pixel signals obtained by the image pickup circuit are reduced by thinning out the pixel signals obtained in different tack from said first mode. As above-stated, both patents mention nothing of as to different modes of processing pixels of an image pickup obtained in different ways.

Applicant 's independent claims 1, 13 and 23, and their respective dependent claims, thus patentably distinguish over the Konishi, et al. and Parulski, et al. patents taken alone, or in combination.

In view of the above, it is submitted that applicant's claims, as amended, patentably distinguish over the cited art of record. Accordingly, reconsideration of the claims is respectfully requested. If the Examiner believes that an interview would expedite consideration of this Amendment or of the application, a request is made that the Examiner telephone applicant's counsel at (212) 790-9273.

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Respectfully submitted,

John J. Torrente

COWAN, LIEBOWITZ & LATMAN
1133 Avenue of the Americas
New York, New York 10036
T (212) 790-9273

John J. Torrente
Reg. No. 26,359
Attorney of Record